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ABSTRACT

Information collected by the Bureau of the Census in the March 1986 and 1987 supplements to the Current Population Survey (CPS) shows changes in selected demographic, social, and economic characteristics of the Hispanic population of the United States since 1982. The Hispanic civilian noninstitutional population increased by 4.3 million (or 30%) from 1980 to 1987. Educational attainment of Hispanics improved since 1982, but lags behind that of non-Hispanics. Hispanic men and women continue to earn less than non-Hispanics. Hispanic families continue to have less total money income than non-Hispanic families. The poverty rate of Spanish-origin families in 1986 was almost three times as high as that of non-Hispanic families. The poverty rate for Hispanic families has not changed significantly between 1981 and 1986, but because of population growth, the number of Hispanic families below the poverty level in 1986 was 24% higher than that in 1981. This report provides brief explanations and specific numbers regarding population change and composition, educational attainment, type of family, unemployment rates, median earnings of persons, income of families, and poverty. The eight data tables include social and economic characteristics by type of Hispanic origin. Technical notes discuss estimating procedures and reliability of the estimates. (JHZ)

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The Hispanic Population in the United States: March 1986 and 1987 (Advance Report)

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This is the first report that uses a revised estimating procedure for Hispanics, which includes an allowance for net undocumented immigration and an increase in the estimate of emigration by legal residents. See appendix A for a discussion of the methodology used in developing current independent estimates of the total Hispanic population.

INTRODUCTION

This report presents advance data and shows changes in selected demographic, social, and economic characteristics of the Hispanic[1] population of the United States since 1982. The Bureau of the Census collected this information in the March 1986 and 1987 supplements to the Current Population Survey (CPS).[2] A forthcoming final report will contain additional information on the characteristics of the Hispanic population and a more thorough explanation of the source and reliability of the estimates.

HIGHLIGHTS

- The Hispanic civilian noninstitutional population increased by 4.3 million (or 30 percent) from 1980 to 1987.
- The educational attainment of Hispanics has improved since 1982, but lags behind that of non-Hispanics.
- Hispanic men and women continue to earn less than non-Hispanics.
- Hispanic families continue to have less total money income than non-Hispanic families.
- The poverty rate of Spanish-origin families in 1986 was almost three times as high as that of non-Hispanic families.
- The poverty rate for Hispanic families has not changed significantly between 1981 and 1986, but because of population growth, the number of Hispanic families below the poverty level in 1986 was 24 percent higher than that in 1981.

POPULATION CHANGE AND COMPOSITION

In March 1987, there were 18.8 million Hispanics in the civilian noninstitutional population of the United States, or about 700,000 more than in 1986. The Hispanic population increased by 30 percent between the 1980 census and the March 1987 CPS, compared with 6 percent for the non-Hispanic population.

In March 1987, the Hispanic civilian noninstitutional population of the United States included the following subgroups:

Mexican origin	11.8 million	(±141,000)[3]
Puerto Rican origin	2.3 million	(±104,000)
Cuban origin	1.0 million	(±72,000)
Central and South American origin	2.1 million	(±101,000)
Other Hispanic[4] origin	1.6 million	(±89,000)

(The estimates of the Puerto Rican and Central and South American populations shown above are not statistically different.) Figure 1 shows the proportional distribution by type of Hispanic origin.

[1] The terms "Hispanic" and "Spanish" are used interchangeably in this report.

[2] Information from the March 1986 and 1987 CPS's shown in this report is based on the civilian noninstitutional population of the United States and members of the Armed Forces in the United States living off post or with their families on post, but excludes all other members of the Armed Forces.

[3] The confidence intervals given in the text of this report reflect a 90-percent level of confidence, or 1.6 standard errors. Standard errors are measures of variations that occur by chance because a sample, rather than an entire population, is surveyed. The sample estimate and its standard error enable one to construct confidence intervals, ranges that would include the average result of all possible samples with a known probability. For example, we can say with a 90-percent level of confidence that the estimate of the Mexican origin population for March 1987 falls within ±141,000 persons.

[4] Unless otherwise noted, persons reporting "Other Hispanic" origin are those whose origins are from Spain, or they are Hispanic persons identifying themselves generally as Hispanic, Spanish, Spanish-American, Hispano, Latino, etc.

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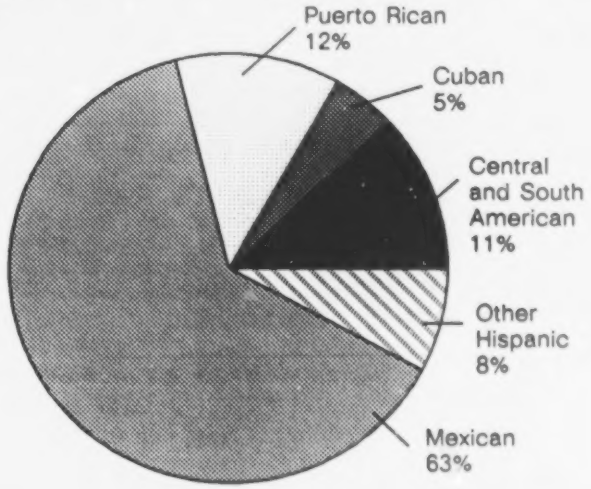
Figure 1.
Hispanics, by Type of Origin: March 1987
(Percent of all Hispanics)



Among Hispanic groups, the highest rate of growth between 1982 and 1987 was experienced by the Central and South American population,[5] 40 percent (±4.4 percentage points); followed by Other Hispanics, 33 percent (±4.4); and Mexicans, 22 percent (±1.1). Puerto Ricans, 11 percent (±1.8), and Cubans, 7 percent (±2.1), experienced the smallest growth during the period.[6]

[5]The percent change between the 1980 census and the March 1987 CPS for the Hispanic subgroups in the civilian noninstitutional population cannot be readily calculated because Armed Forces data for Hispanics by subgroup are not readily available from the Department of Defense. Therefore, the civilian Hispanic subgroup populations cannot be accurately calculated for April 1, 1980.

[6]The estimates of Cubans and Puerto Ricans show an apparent decrease since 1985. (For 1985 and 1987, the estimates of Cubans were 1,036,000 and 1,017,000, respectively. For Puerto Ricans, the respective estimates are 2,562,000 and 2,284,000.) The apparent change in the Cuban population is small and may be attributed to random fluctuations due to sampling. However, the change in the Puerto Rican numbers is large and cannot be attributed entirely to sampling variability. For additional details, see the "Fluctuations in the Data" section of appendix A.

Table A. Summary Social and Economic Characteristics of the Hispanic Population: March 1987 and 1982

(For the United States. Numbers in thousands)

Characteristic	Hispanic		Not Hispanic[1]	
	1987	1982	1987	1982
Total persons	18,790	15,364	219,999	212,014
Percent of total population	7.9	6.8	92.1	93.2
Education				
Percent of persons 25 years old and over completed:				
4 years of high school or more	50.9	45.4	77.3	72.3
4 or more years of college	8.6	7.7	20.6	18.3
Type of Family				
Total families	4,403	3,730	60,088	57,319
Percent	100.0	100.0	100.0	100.0
Married-couple	70.8	74.1	80.6	81.8
Female householder, no husband present	23.4	21.5	15.7	15.0
Male householder, no wife present	5.7	4.4	3.8	3.2
Employment[2]				
Percent unemployed	10.2	13.4	6.8	9.5
Median Earnings of Persons in Previous Year[3]				
Current dollars:				
Males with earnings	11,958	10,850	19,588	15,359
Females with earnings	8,258	6,597	10,110	7,264
In 1986 dollars:				
Males with earnings	11,958	13,081	19,588	18,517
Females with earnings	8,258	7,953	10,110	8,757
Family Income in Previous Year				
Median income:				
In current dollars:	19,995	16,510	30,231	22,794
In 1986 dollars:	19,995	19,904	30,231	27,480
Below Poverty Level in Previous Year				
Families	1,085	875	5,938	6,022
Percent	24.7	23.5	9.9	10.5

[1]Includes persons who did not know or did not report on origin.
[2]Persons 16 years old and over.
[3]Civilians 15 years old and over.

SOCIAL CHARACTERISTICS

Educational attainment. Hispanics showed gains in educational levels between 1982 and 1987. Specifically, the proportion of Hispanic persons 25 years old and over with 4 years of high school or more years of education completed was 45 percent (±1.5) in 1982 and 51 percent (±1.3) in 1987. The proportion of Hispanics 25 years old and over who completed 4 or more years of college, however, did not change significantly—8 percent (±0.8) in 1982 and 9 percent (±0.7) in 1987. For non-Hispanics, a comparable change was evident for those completing 4 years of high school or more. Furthermore, non-Hispanics also made gains in the proportion completing 4 or more years of college.

Type of family. The proportion of married-couple families among Hispanics was lower in 1987 than in 1982: 71 percent (±1.4) and 74 percent (±1.5), respectively. A similar change was evident for non-Hispanics. The proportions of families maintained by a man or woman, with no spouse present were larger in 1987 than in 1982 for both Hispanics and non-Hispanics.

Unemployment rates. Employment rates among Hispanics and non-Hispanics 16 years old and over went up between March 1982 and March 1987. However, the unemployment rate of Hispanics, 10 percent (±0.6), remains higher than that of non-Hispanics, 7 percent (±0.2), in 1987.

Median earnings of persons. The median earnings of Hispanic civilians 15 years old and over remained lower than those of non-Hispanics. In 1986, the median earnings of Hispanic men, $11,958 (±$322), was 61 percent (±1.8) of the median earnings of non-Hispanic men, $19,588 (±$228). The comparable ratio of Hispanic women's earnings to non-Hispanic women's earnings was 82 percent (±4.8).

Income of families. After adjusting median family money income for the 21-percent increase in consumer prices, no significant change was evident in the real median money income of Hispanic families between 1981 and 1986. Non-Hispanic families experienced a 10-percent (±1.3) increase in real median money income.[7] However, an improvement in Hispanic family income is apparent when 1982, the end of the most recent recession, is used as the base year for comparison. While their real income decreased between 1981 and 1982, it subsequently increased from $18,321 (±$645) in 1982 to $19,995 (±$862) in 1986—a 9-percent (±6.1) increase. Non-Hispanics experienced an 11-percent (±1.2) increase in real median family income over the same period; not statistically different from the increase experienced by Hispanic families.

Poverty. The poverty rate of Hispanic families did not improve between 1981 and 1986—23.5 percent (±1.6) and 24.7 percent (±1.5), respectively. About 200,000 (±104,000) more Hispanic families were liv-

[7]Changes in real earnings or income refer to comparisons after adjusting for inflation. The percentage change in prices between 1981 and 1986 was computed by dividing the annual average Consumer Price Index (CPI) for 1986 by the annual average value of the CPI for 1981. For a more detailed discussion, see Current Population Reports, Series P-60, No. 157, *Money Income and Poverty Status of Families and Persons in the United States: 1986 (Advance Data From the March 1987 Current Population Survey.*

Table B. Economic Indicators of the Hispanic Population: 1981 to 1986

(For the United States)

Characteristic and origin	1986	1985	1984	1983	1982	1981
Unemployment Rates (annual averages)[1]						
Hispanic origin	10.6	10.5	10.7	13.7	13.8	10.4
Not of Hispanic origin	6.7	7.0	7.3	9.3	9.4	7.4
Median Money Income of Families (in 1986 dollars)						
Hispanic origin	19,995	19,392	19,880	18,606	18,321	19,904
Not of Hispanic origin	30,231	29,020	28,449	27,669	27,148	27,480
Poverty Rate of Families						
Hispanic origin	24.7	25.5	25.2	26.0	27.2	23.5
Not of Hispanic origin	9.9	10.4	10.7	11.5	11.4	10.2

[1]Persons 16 years old and over in the civilian labor force. The average annual unemployment rates shown in this table and figure 3 were calculated by the Bureau of Labor Statistics, Department of Labor. The annual average is more representative of the unemployment experienced by the population each year than the rate from the March Current Population Survey (CPS). Unemployment data shown elsewhere in this report represent the employment status of persons in March of each year and are consistent with previous CPS reports on the Hispanic population.

Figure 2.
Median Family Money Income in 1981 and 1986
(In 1986 dollars)

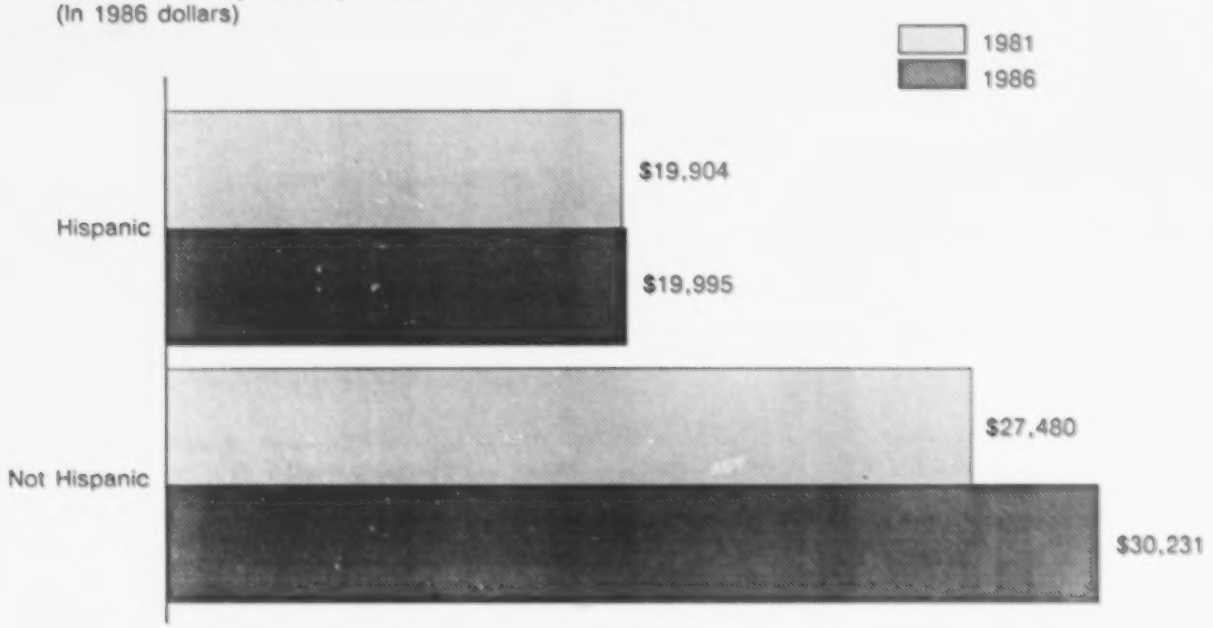
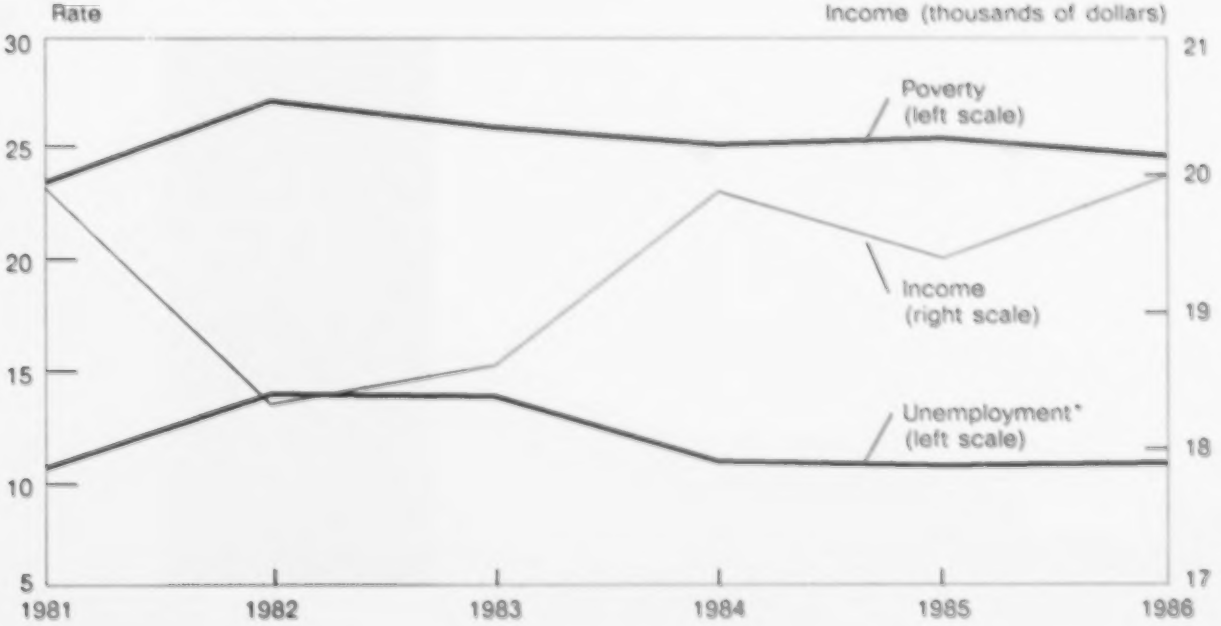


Figure 3.
Median Family Money Income, Poverty Rates of Families, and Annual Average Unemployment Rates for the Hispanic Population: 1981 to 1986
(Income in 1986 dollars)



Shade-Recessionary period
* Annual average unemployment rates, Bureau of Labor Statistics, Department of Labor.

ing below the poverty level in 1986 than in 1981—a 24-percent (±13.2) increase. An improvement in the poverty rate of Hispanic families is evident, however, when the end of the last recession is used as the base year for comparison. The poverty rate of Hispanic families increased between 1981 and 1982, but then decreased from 27.2 percent (±1.7) in 1982 to 24.7 percent (±1.5) in 1986.

Of the 1.1 million (±77,400) Hispanic families that were living below the poverty level in 1986, 49 percent (±3.5) were maintained by a woman with no husband present. Families with householders who had completed less than 4 years of high school constituted 62 percent (±3.4) of the Hispanic families below the poverty level in 1986.[8]

[8]Note: Poverty determination is based on money income and does not include the value of noncash benefits such as food stamps, Medicaid, and public housing.

Table 1.Change in the Total and Hispanic Populations: April 1980 to March 1987

(For the United States. Numbers in thousands)

Origin	March 1987 CPS (civilian noninstitutional population)	1980 census[1]		Percent change, 1980-87 (civilian noninstitutional population)
		Civilian noninstitutional population	Resident population	
Total population	238,789	222,461	226,546	7.3
Hispanic origin	18,790	14,458	14,609	30.0
Not of Hispanic origin[2]	219,999	208,003	211,937	5.8

[1] Data as of April 1, 1980.

[2] For the CPS, this category includes persons who did not know or did not report on origin.

NOTE: Changes for the Hispanic subgroup populations between the 1980 census and the March 1987 CPS cannot readily be calculated. Armed Forces data for Hispanics by subgroup are not readily available from the Department of Defense, therefore, the civilian Hispanic subgroup populations cannot be accurately calculated for April 1, 1980.

Table 2. Persons of Hispanic Origin, by Type of Origin: March 1987 and 1982 CPS and 1980 Census

(For the United States. Numbers in thousands)

Origin	March 1987 CPS[1]		March 1982 CPS[1]		1980 census[2]	
	Number	Percent	Number	Percent	Number	Percent
Total Hispanic origin	18,790	100.0	15,364	100.0	14,609	100.0
Mexican	11,762	62.6	9,642	62.8	8,740	59.8
Puerto Rican	2,284	12.2	2,051	13.3	2,014	13.8
Cuban	1,017	5.4	950	6.2	803	5.5
Central and South American	2,139	11.4	1,523	9.9		
Other Hispanic	1,588	8.5	1,198	7.8	[3] 3,051	20.9

[1]Estimates from the March 1987 and 1982 CPS's reflect the civilian noninstitutional population of the United States and members of the Armed Forces in the United States living off post or with their families on post, but excludes all other members of the Armed Forces.

[2]Data from the 1980 census are based on 100-percent tabulations of the resident population in the United States on April 1, 1980.

[3]In the 1980 census, the "Other Spanish" category included persons from Spain, the Spanish-speaking countries of Central and South America, and Hispanic persons who identified themselves generally as Latino, Spanish-American, Spanish, etc. In the CPS, the category "Central or South American" is listed as a separate origin.

Table 3. Selected Social Characteristics of All Persons and Persons of Hispanic Origin, by Type of Origin: March 1987

(For the United States. Numbers in thousands)

Characteristic	Total population	Hispanic origin						Not of Hispanic origin[1]
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other Hispanic	
Age								
Total	238,789	18,790	11,762	2,284	1,017	2,139	1,588	219,999
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 years	7.6	10.6	11.4	11.7	7.6	8.9	7.5	7.3
5 and 6 years	3.0	4.5	5.1	5.1	1.4	3.4	3.1	2.9
7 to 9 years	4.3	6.0	6.5	7.3	2.2	4.9	4.2	4.2
10 to 13 years	5.5	7.4	8.1	7.1	4.4	6.0	6.2	5.3
14 and 15 years	2.9	3.5	4.0	3.1	1.9	2.8	2.6	2.9
16 and 17 years	3.1	3.5	3.8	3.9	2.1	2.6	2.8	3.1
18 and 19 years	3.0	3.5	3.7	3.4	2.2	4.1	3.0	2.9
20 and 21 years	3.1	4.1	4.3	3.5	4.0	4.2	4.0	3.0
22 to 24 years	5.0	6.5	6.6	6.3	6.4	7.3	5.1	4.9
25 to 29 years	9.1	10.3	10.3	9.7	9.2	12.1	9.3	9.0
30 to 34 years	8.8	8.9	8.6	8.4	7.7	10.4	10.5	8.8
35 to 44 years	14.1	13.0	11.9	14.5	12.4	16.8	14.2	14.2
45 to 54 years	9.6	7.7	6.9	6.9	13.3	9.0	9.9	9.8
55 to 64 years	9.2	5.5	4.8	5.3	13.2	4.5	7.8	9.5
65 to 74 years	7.2	3.1	2.7	2.5	7.1	1.9	5.8	7.6
75 years and over	4.5	1.8	1.5	1.1	5.0	0.9	3.8	4.7
18 years and over	73.5	64.5	61.2	61.7	80.4	71.2	73.5	74.3
21 years and over	69.0	58.9	55.5	56.8	76.0	65.0	68.6	69.9
Median age (years)	31.9	25.1	23.5	24.3	35.8	27.3	30.9	32.6
Sex								
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	48.6	50.1	51.6	46.4	50.3	47.0	48.4	48.5
Female	51.4	49.9	48.4	53.6	49.7	53.0	51.6	51.5
Marital Status								
Total, 15 years and over	186,688	13,104	7,869	1,534	849	1,617	1,234	173,584
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Single (never married)	26.3	31.5	31.8	35.3	22.5	33.5	28.7	26.0
Married	59.3	57.5	57.9	51.6	59.9	59.2	58.0	59.4
Widowed	7.1	3.9	3.7	3.8	7.5	2.9	4.2	7.3
Divorced	7.3	7.1	6.6	9.3	10.1	4.4	9.1	7.3
Education								
Total, 25 years and over	149,144	9,449	5,489	1,106	690	1,190	973	139,694
Percent completed—								
Less than 5 years of school	2.4	11.9	15.4	10.3	6.0	6.1	5.2	1.8
4 years of high school or more	75.6	50.9	44.8	53.8	61.6	59.3	64.2	77.3
4 or more years of college	19.9	8.6	5.8	8.0	17.1	12.2	14.2	20.6
Median school years completed	12.7	12.0	10.8	12.1	12.4	12.3	12.4	12.7
Type of Family								
All families	64,491	4,403	2,611	593	294	518	386	60,088
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married-couple families	79.9	70.8	74.8	53.0	77.6	66.8	72.0	80.6
Female householder, no husband present	16.2	23.4	19.2	43.3	17.7	25.5	22.8	15.7
Male householder, no wife present	3.9	5.7	6.0	3.7	4.8	7.7	5.2	3.8
Size of Family								
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Two persons	40.8	25.3	22.2	29.3	36.7	25.3	31.3	42.0
Three persons	23.9	22.8	21.1	26.5	25.2	23.0	26.9	23.9
Four persons	21.1	25.0	24.5	23.8	28.2	28.4	22.5	20.8
Five persons	9.1	14.9	16.4	14.0	6.1	14.7	13.0	8.7
Six persons	3.2	6.7	8.4	3.2	3.4	5.0	4.4	3.0
Seven or more persons	1.8	5.3	7.3	3.0	-	3.9	1.6	1.6
Mean number of persons	3.19	3.83	4.05	3.50	3.18	3.71	3.47	3.14

- Represents zero or rounds to zero.
[1]Includes persons who did not know or did not report on origin.

Table 4. Selected Economic Characteristics of All Persons and Persons of Hispanic Origin, by Type of Origin: March 1987

(For the United States. Numbers in thousands)

Characteristic	Total population	Hispanic origin						Not of Hispanic origin[1]
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other Hispanic	
Labor Force Status								
Total, 16 years and over	183,093	12,772	7,642	1,499	839	1,581	1,212	170,320
In civilian labor force	118,134	8,302	5,072	808	560	1,127	735	109,832
Percent in civilian labor force	64.5	65.0	66.4	53.9	66.7	71.3	60.7	64.5
Percent unemployed	7.0	10.2	11.7	11.0	5.5	7.9	5.6	6.8
Males, 16 years and over	87,524	6,343	3,962	655	418	746	562	81,181
In civilian labor force	65,174	5,030	3,194	470	328	636	401	60,145
Percent in civilian labor force	74.5	79.3	80.6	71.7	78.7	85.2	71.4	74.1
Percent unemployed	7.4	10.6	12.1	12.2	4.9	7.8	6.2	7.1
Females, 16 years and over	95,568	6,430	3,681	844	421	834	649	89,139
In civilian labor force	52,960	3,272	1,878	338	231	491	334	49,688
Percent in civilian labor force	55.4	50.9	51.0	40.1	54.9	58.9	51.4	55.7
Percent unemployed	6.6	9.5	11.2	9.2	6.4	8.1	4.9	6.4
Occupation								
Employed males, 16 years and over	60,368	4,497	2,809	412	312	587	376	55,871
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	25.3	10.8	8.8	12.8	19.0	10.0	17.9	26.5
Technical, sales, and admin. support	19.9	15.6	12.4	21.6	24.1	19.2	20.2	20.3
Service occupations	9.9	14.3	12.9	14.9	9.1	22.8	15.3	9.5
Farming, forestry, and fishing	4.4	10.1	14.6	1.1	2.2	3.0	4.4	4.0
Precision production, craft, and repair	20.0	21.1	22.5	15.8	21.8	18.8	19.7	19.9
Operators, fabricators, and laborers	20.5	28.0	28.7	33.8	23.8	26.2	22.4	19.9
Employed females, 16 years and over	49,486	2,960	1,667	307	216	451	318	46,526
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	24.8	14.6	13.0	15.4	25.4	11.6	19.0	25.5
Technical, sales, and admin. support	45.2	41.3	40.0	50.0	44.7	35.7	45.3	45.5
Service occupations	17.9	23.5	24.8	18.9	14.6	29.0	19.5	17.6
Farming, forestry, and fishing	1.0	1.6	2.3	0.6	0.0	0.4	1.4	0.9
Precision production, craft, and repair	2.2	3.5	3.4	3.0	4.2	3.4	4.1	2.2
Operators, fabricators, and laborers	8.8	15.5	16.5	12.1	11.1	19.9	10.8	8.4
Median Earnings in 1986 [2]								
Males with earnings (dollars)	18,782	11,958	11,034	15,077	16,841	12,628	16,148	19,588
Females with earnings (dollars)	10,016	8,258	7,446	11,053	11,664	8,537	9,704	10,110
Family Income in 1986								
Median income (dollars)	29,458	19,995	19,326	14,584	26,770	22,246	24,240	30,231
Below Poverty Level in 1986								
Families	7,023	1,085	649	226	39	97	75	5,938
Percent below poverty level[3]	10.9	24.7	24.9	38.1	13.3	18.7	19.4	9.9
Family householder[4] —								
65 years old and over:								
Number	716	58	34	6	9	2	7	659
Percent	7.0	17.4	17.5	(B)	(B)	(B)	(B)	6.7
Not a high school graduate:[5]								
Number	3,008	678	434	123	17	61	43	2,330
Percent	19.9	33.6	32.8	48.0	16.5	31.3	31.4	17.8
Female, husband absent:								
Number	3,613	528	244	171	15	56	42	3,085
Percent	34.6	51.2	48.6	66.5	(B)	42.4	47.7	32.8
Unrelated individuals:								
Number	6,846	553	302	103	39	67	42	6,293
Percent	21.6	32.8	34.5	41.4	31.7	29.0	20.4	21.0

(B) Base less than 75,000. Summary measures (such as medians and percent distributions) are shown only when the base is 75,000 or greater.

[1]Includes persons who did not know or did not report on origin.

[2]For civilian persons 15 years old and over.

[3]Percent of all families of specified origin.

[4]Percentages based on householders with specified characteristics and of specified origin.

[5]Householders 25 years old and over.

Table 5. Selected Social Characteristics of All Persons and Persons of Hispanic Origin, by Type of Origin: March 1986

(For the United States. Numbers in thousands)

Characteristic	Total population	Hispanic origin						Not of Hispanic origin[1]
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other Hispanic	
Age								
Total	236,749	18,091	11,200	2,340	1,003	2,006	1,542	218,658
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 years	7.7	10.9	12.3	11.0	4.0	9.1	7.3	7.4
5 and 6 years	3.0	4.2	4.6	5.2	0.8	3.3	3.1	2.9
7 to 9 years	4.2	5.8	6.1	7.0	3.3	4.9	5.1	4.1
10 to 13 years	5.5	7.5	8.0	7.9	4.0	6.1	6.8	5.4
14 and 15 years	3.1	3.8	3.9	4.5	2.1	4.0	2.8	3.1
16 and 17 years	3.1	3.7	3.9	4.1	2.3	3.2	3.4	3.0
18 and 19 years	3.0	3.5	3.7	3.6	2.3	3.0	3.7	3.0
20 and 21 years	3.2	4.2	4.7	3.3	3.9	3.6	3.2	3.1
22 to 24 years	5.2	6.5	6.6	5.8	5.5	6.8	6.5	5.1
25 to 29 years	9.1	10.4	10.7	9.2	7.8	12.4	9.3	9.0
30 to 34 years	8.6	8.8	8.4	9.3	10.7	9.4	9.5	8.6
35 to 44 years	13.7	12.2	11.4	12.6	11.3	16.3	13.1	13.9
45 to 54 years	9.6	8.0	6.9	8.4	15.3	9.6	9.1	9.7
55 to 64 years	9.3	5.4	4.7	4.8	12.0	4.8	7.9	9.6
65 to 74 years	7.1	3.2	2.6	2.2	9.7	2.3	5.9	7.5
75 years and over	4.4	1.8	1.6	1.0	5.1	1.2	3.3	4.6
18 years and over	73.4	64.1	61.2	60.3	83.5	69.4	71.5	74.1
21 years and over	68.8	58.5	55.1	55.1	79.9	64.2	66.6	69.7
Median age (years)	31.6	25.0	23.3	23.7	38.0	27.4	29.4	32.3
Sex								
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	48.6	49.9	51.1	46.5	50.6	48.2	48.7	48.5
Female	51.4	50.1	48.9	53.5	49.4	51.8	51.3	51.5
Marital Status								
Total, 15 years and over	184,828	12,597	7,501	1,562	870	1,492	1,173	172,230
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Single (never married)	26.3	31.8	31.7	38.1	23.5	32.1	30.3	25.8
Married	59.2	57.0	58.5	49.1	58.1	58.2	55.4	59.3
Widowed	7.3	4.2	3.7	3.7	8.5	3.6	5.9	7.5
Divorced	7.3	6.9	6.1	9.1	9.9	6.0	8.4	7.4
Education								
Total, 25 years and over	146,606	9,030	5,178	1,113	721	1,122	896	137,576
Percent completed—								
Less than 5 years of school	2.7	12.9	16.3	10.6	8.6	7.3	5.9	2.0
4 years of high school or more	74.7	48.5	43.3	44.7	59.1	56.8	63.9	76.5
4 or more years of college	19.4	8.4	5.4	8.4	15.4	14.0	13.1	20.2
Median school years completed	12.6	11.7	10.6	11.1	12.3	12.2	12.4	12.7
Type of Family								
All families	63,558	4,206	2,494	594	292	457	370	59,352
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married-couple families	80.1	70.4	75.4	50.5	78.8	66.1	67.0	80.8
Female householder, no husband present	16.1	23.3	18.4	45.6	15.4	25.4	23.5	15.6
Male householder, no wife present	3.8	6.3	6.1	3.7	5.8	8.3	9.2	3.6
Size of Family								
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Two persons	40.1	25.2	21.3	27.6	38.4	24.1	38.4	41.1
Three persons	24.2	23.3	22.2	26.4	25.0	27.1	19.7	24.3
Four persons	21.0	24.9	24.4	27.7	22.3	28.0	22.2	20.7
Five persons	9.6	14.2	15.5	12.2	9.9	13.6	12.7	9.3
Six persons	3.2	6.8	8.8	3.2	2.7	4.4	4.9	3.0
Seven or more persons	1.9	5.6	7.7	3.0	1.7	2.6	2.2	1.6
Mean number of persons	3.21	3.87	4.09	3.60	3.28	3.71	3.40	3.16

[1] Includes persons who did not know or did not report on origin.

Table 6. Selected Economic Characteristics of All Persons and Persons of Hispanic Origin, by Type of Origin: March 1986

(For the United States. Numbers in thousands)

Characteristic	Total population	Hispanic origin						Not of Hispanic origin[1]
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other Hispanic	
Labor Force Status								
Total, 16 years and over	181,034	12,273	7,291	1,508	861	1,457	1,155	168,762
In civilian labor force	116,087	7,837	4,773	776	570	995	722	108,250
Percent in civilian labor force	64.1	63.9	65.5	51.4	66.3	68.3	62.5	64.1
Percent unemployed	7.5	10.6	11.2	15.5	5.4	8.5	8.4	7.3
Males, 16 years and over	86,544	6,095	3,723	685	439	708	540	80,450
In civilian labor force	64,355	4,814	3,021	464	343	574	411	59,541
Percent in civilian labor force	74.4	79.0	81.1	67.8	78.2	81.1	76.1	74.0
Percent unemployed	7.8	11.3	11.7	16.4	6.3	8.7	10.0	7.5
Females, 16 years and over	94,490	6,178	3,568	824	422	749	615	88,312
In civilian labor force	51,732	3,023	1,752	311	227	421	311	48,710
Percent in civilian labor force	54.7	48.9	49.1	37.8	53.9	56.2	50.6	55.2
Percent unemployed	7.2	9.5	10.3	14.1	4.1	8.1	6.2	7.0
Occupation								
Employed males, 16 years and over	59,352	4,271	2,667	388	321	524	370	55,081
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	24.9	11.2	8.9	12.2	19.8	10.4	19.7	25.9
Technical, sales, and admin. support	20.3	15.9	12.9	22.1	24.6	18.5	19.0	20.6
Service occupations	9.9	16.0	13.9	20.8	11.8	23.7	18.2	9.5
Farming, forestry, and fishing	4.2	6.2	8.6	1.8	1.2	1.7	4.3	4.1
Precision production, craft, and repair	20.1	20.1	20.7	16.5	22.1	20.4	17.1	20.1
Operators, fabricators, and laborers	20.5	30.7	34.9	26.6	20.6	25.3	21.8	19.8
Employed females, 16 years and over	48,029	2,736	1,572	268	218	387	292	45,293
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional specialty	24.0	13.7	11.3	18.7	20.7	13.7	17.2	24.6
Technical, sales, and admin. support	45.8	40.8	42.1	38.6	47.5	30.4	44.7	46.1
Service occupations	18.3	23.6	24.6	19.7	13.9	29.4	20.7	18.0
Farming, forestry, and fishing	1.0	1.4	2.1	0.3	1.1	0.6	0.2	0.9
Precision production, craft, and repair	2.3	3.7	4.0	2.0	2.6	4.0	3.4	2.3
Operators, fabricators, and laborers	8.6	16.9	15.8	20.7	14.2	22.0	13.9	8.1
Median Earnings in 1985 [2]								
Males with earnings (dollars)	17,779	12,035	11,474	12,993	14,646	11,798	15,073	18,457
Females with earnings (dollars)	9,328	7,919	7,290	9,196	10,947	8,380	8,361	9,452
Family Income in 1985								
Median income (dollars)	27,735	19,027	19,400	12,865	26,969	19,096	21,473	28,473
Below Poverty Level in 1985								
Families	7,223	1,074	608	241	42	106	77	6,149
Percent below poverty level[3]	11.4	25.5	24.4	40.6	14.4	23.2	20.8	10.4
Family householder[4] —								
65 years old and over:								
Number	708	54	29	2	11	7	5	653
Percent	7.0	16.6	15.9	(B)	(B)	(B)	(B)	6.7
Not a high school graduate:[5]								
Number	3,182	698	407	157	27	62	45	2,485
Percent	20.6	34.0	30.9	50.3	25.0	34.3	32.8	18.6
Female, husband absent:								
Number	3,474	521	205	191	17	61	47	2,953
Percent	34.0	53.1	44.6	70.5	(B)	52.6	54.0	32.0
Unrelated individuals:								
Number	6,725	532	268	83	40	95	47	6,193
Percent	21.5	33.2	32.3	38.4	32.5	41.7	22.8	20.8

(B) Base less than 75,000. Summary measures (such as medians and percent distributions) are shown only when the base is 75,000 or greater.

[1] Includes persons who did not know or did not report on origin.

[2] For civilian persons 15 years old and over.

[3] Percent of all families of specified origin.

[4] Percentages based on householders with specified characteristics and of specified origin.

[5] Householders 25 years old and over.

Table 7. Selected Social Characteristics of All Persons and Persons of Hispanic Origin, by Type of Origin: March 1982

(For the United States. Numbers in thousands)

Characteristic	Total population	Hispanic origin						Not of Hispanic origin[1]
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other Hispanic	
Age								
Total	227,378	15,364	9,642	2,051	950	1,523	1,198	212,014
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 years	7.6	11.1	12.3	11.1	4.7	9.1	9.5	7.3
5 and 6 years	2.8	4.3	4.8	4.5	1.9	3.1	3.3	2.7
7 to 9 years	4.2	6.2	6.5	6.1	4.3	6.2	5.0	4.1
10 to 13 years	6.4	8.0	8.6	8.5	3.5	6.9	7.0	6.2
14 and 15 years	3.2	3.6	3.7	4.7	1.9	2.6	3.4	3.1
16 and 17 years	3.4	4.2	4.1	5.7	3.8	3.5	4.1	3.4
18 and 19 years	3.6	4.2	4.5	4.7	4.0	3.4	2.9	3.5
20 and 21 years	3.7	4.3	4.4	4.0	3.8	4.1	4.6	3.6
22 to 24 years	5.6	6.3	6.8	5.2	4.9	6.7	5.0	5.5
25 to 29 years	8.9	9.7	9.9	9.8	7.2	11.5	7.7	8.8
30 to 34 years	8.1	8.2	8.3	8.1	4.7	9.3	8.3	8.1
35 to 44 years	12.1	11.3	10.4	12.0	12.0	16.2	11.1	12.1
45 to 54 years	9.8	8.1	7.0	7.3	16.5	9.5	9.9	9.9
55 to 64 years	9.6	5.6	4.8	4.9	12.8	4.3	9.0	9.9
65 to 74 years	6.9	3.2	2.5	2.5	8.9	2.9	5.5	7.2
75 years and over	4.2	1.7	1.4	0.8	5.1	0.7	3.9	4.3
18 years and over	72.4	62.6	60.0	59.3	79.8	68.6	67.8	73.2
21 years and over	67.1	56.1	53.2	52.8	73.5	62.9	62.7	67.9
Median age (years)	30.4	23.9	22.5	22.4	39.4	26.9	28.5	31.0
Sex								
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	48.4	49.7	50.7	47.8	50.8	48.9	44.8	48.3
Female	51.6	50.3	49.3	52.2	49.2	51.1	55.2	51.7
Marital Status								
Total, 15 years and over	176,188	10,542	6,366	1,375	802	1,117	882	165,646
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Single (never married)	25.9	29.6	28.8	36.5	23.0	31.3	27.9	25.7
Married	60.4	60.1	62.2	52.1	62.5	59.1	56.8	60.4
Widowed	7.2	4.1	3.5	4.0	5.6	3.6	7.4	7.4
Divorced	6.5	6.3	5.5	7.4	8.9	6.0	8.0	6.5
Education								
Total, 25 years and over	135,528	7,337	4,277	931	638	828	663	128,190
Percent completed—								
Less than 5 years of school	3.2	15.3	19.6	13.5	7.8	6.8	7.5	2.4
4 years of high school or more	70.8	45.4	40.2	41.7	49.1	61.6	60.3	72.3
4 or more years of college	17.7	7.7	5.9	5.1	13.4	12.7	11.7	18.3
Median school years completed	12.5	10.8	9.7	10.6	11.7	12.3	12.3	12.6
Type of Family								
All families	61,048	3,730	2,231	536	271	378	314	57,319
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married-couple families	81.3	74.1	79.1	52.2	79.3	70.6	75.2	81.8
Female householder, no husband present	15.4	21.5	16.7	42.9	17.3	23.3	20.7	15.0
Male householder, no wife present	3.3	4.4	4.2	4.9	3.7	6.1	4.1	3.2
Size of Family								
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Two persons	39.9	23.7	20.7	24.5	35.8	24.3	33.1	41.0
Three persons	23.1	23.5	21.5	28.0	25.5	26.7	24.2	23.0
Four persons	20.6	22.9	23.3	20.6	19.2	25.4	24.2	20.5
Five persons	9.8	15.2	16.0	15.6	13.3	14.6	10.8	9.5
Six persons	4.0	7.2	8.9	4.8	3.7	5.0	4.5	3.8
Seven or more persons	2.6	7.5	9.6	6.4	2.2	4.0	3.2	2.2
Mean number of persons	3.25	3.74	3.93	3.64	3.25	3.54	3.26	3.22

[1] Includes persons who did not know or did not report on origin.

Table 8. Selected Economic Characteristics of All Persons and Persons of Hispanic Origin, by Type of Origin: March 1982

(For the United States. Numbers in thousands)

Characteristic	Total population	Hispanic origin						Not of Hispanic origin[1]
		Total	Mexican	Puerto Rican	Cuban	Central and South American	Other Hispanic	
Labor Force Status								
Total, 16 years and over	172,541	10,268	6,180	1,334	795	1,099	860	162,273
In civilian labor force	108,746	6,567	4,109	689	477	742	549	102,179
Percent in civilian labor force	63.0	64.0	66.5	51.7	60.1	67.5	63.8	63.0
Percent unemployed	9.7	13.4	13.3	17.4	10.7	13.9	10.3	9.5
Males, 16 years and over	82,103	5,040	3,122	605	400	529	383	77,063
In civilian labor force	61,682	4,058	2,608	435	291	435	289	57,624
Percent in civilian labor force	75.1	80.5	83.5	71.8	72.7	82.3	75.4	74.8
Percent unemployed	10.3	13.2	12.9	20.5	8.8	12.3	10.4	10.1
Females, 16 years and over	90,438	5,228	3,058	728	394	570	477	85,210
In civilian labor force	47,064	2,509	1,501	254	187	307	260	44,555
Percent in civilian labor force	52.0	48.0	49.1	34.9	47.3	53.8	54.5	52.3
Percent unemployed	8.9	13.6	14.0	12.1	13.7	16.1	10.2	8.7
Median Earnings in 1981 [2]								
Males with earnings (dollars)	15,024	10,850	10,847	10,484	10,995	10,454	12,052	15,359
Females with earnings (dollars)	7,221	6,597	6,112	7,754	6,899	6,847	7,338	7,264
Family Income in 1981								
Median income (dollars)	22,343	16,510	16,994	11,536	18,173	16,875	19,602	22,794
Below Poverty Level in 1981								
Families	6,898	875	497	222	37	65	55	6,022
Percent below poverty level[3]	11.3	23.5	22.3	41.4	13.7	17.2	17.5	10.5
Family householder[4] —								
65 years old and over:								
Number	860	72	39	8	8	3	14	788
Percent	9.1	25.2	25.2	(B)	(B)	(B)	(B)	8.6
Not a high school graduate:[5]								
Number	3,302	575	346	139	21	39	31	2,728
Percent	19.5	31.2	29.1	47.3	17.2	30.5	27.7	18.1
Female, husband absent:								
Number	3,268	426	182	167	16	37	24	2,843
Percent	34.7	53.1	48.8	72.6	(B)	42.0	(B)	33.0
Unrelated individuals:								
Number	6,491	356	183	57	31	54	32	6,134
Percent	23.5	31.1	29.1	34.5	36.0	37.5	26.7	23.1

(B) Base less than 75,000. Summary measures (such as medians and percent distributions) are shown only when the base is 75,000 or greater.

[1] Includes persons who did not know or did not report on origin.

[2] For civilian persons 15 years old and over.

[3] Percent of all families of specified origin.

[4] Percentages based on householders with specified characteristics and of specified origin.

[5] Householders 25 years old and over.

Appendix A. Technical Notes

Revised estimating procedure. This report presents estimates of the Hispanic population based on a revised estimating procedure. The Bureau of the Census adjusted the Hispanic population totals from both the 1986 and 1987 CPS's to conform with independently derived estimates of the Hispanic population. This general procedure was used on an experimental basis for the first time in the March 1982 CPS.[1] The Census Bureau subsequently revised the methodology and used it to develop post-census estimates of Hispanics for 1983 through 1985.[2] The procedure will be refined further as new data on births, deaths, emigration, and immigration become available.

Beginning with population estimates and CPS controls for January 1986, the Census Bureau made two major modifications in the methods used to produce national estimates for the population by age, sex, race, and Hispanic origin. The first change was an allowance for net undocumented immigration into the United States that had occurred since the 1980 census. This change added 200,000 persons per year to the estimate for the total population. The second change was an increase in the estimate of migration out of the United States by legal residents from 36,000 per year to 160,000. The net effect of these two changes was to add 76,000 persons per year to the estimate for the total population.[3] The data for the March 1982 CPS shown in this report do not reflect the above modifications.

Some undocumented immigrants from Spanish culture countries (approximately 1.4 million) were counted in the 1980 census.[4] These undocumented immigrants were, therefore, reflected in the post-census independent estimates for Hispanics that were used for 1982 to 1985. These previous post-census estimates, however, included no allowance for net undocumented immigration that occurred after 1980 because there were no empirically-based estimates available. More recent research has suggested that the overall undocumented population has grown annually by between 100,000 and 300,000 since 1980.[5] About 70 percent of the undocumented population is estimated to be Hispanic. As a result of the inclusion of this component in the estimation procedure (instituted in January 1986), about 141,000 persons were added to the current independent estimates of the Hispanic population for each year since 1980.

Research over the last decade suggests that emigration of legal foreign-born residents from the United States was much higher than the figures being used. These higher estimates of legal emigration were not incorporated into the international migration component of the post-census population estimates until an allowance for net undocumented immigration could be incorporated, in order to avoid understating net immigration. The effect of the new figures for legal emigration is a decrease of about 31,000 per year in the estimated Hispanic population for years since 1980.

The net effect on the Hispanic population of the new figures for legal emigration and net undocumented immigration is an increase of about 110,000 per year. This increase amounts to about 18 percent of the 4.3 million person increase in the Hispanic population between the 1980 census and the March 1987 CPS.

Fluctuations in the data. The data in this report are based on sample surveys and are therefore subject to two types of errors: sampling and nonsampling. Sampling error arises from variations that occur by chance because a sample rather than a complete census is used to survey the population. Caution should be exercised in the use of survey data for small groups of the population (e.g., smaller Hispanic subgroups) because they are more likely to be affected by sampling variability. (For a more detailed explanation of sampling errors and variability, see the "Reliability of Estimates" section in appendix B.)

Random annual fluctuations in the CPS estimates for the total Hispanic population were noted in the past but have been eliminated through the use of current independently derived estimates of the Hispanic population

[1] See appendixes A and B, Current Population Reports, Series P-20, No. 396, *Persons of Spanish Origin in the United States: March 1982.*

[2] See forthcoming U.S. Bureau of the Census report, Current Population Reports, Series P-20, *The Hispanic Population in the United States: March 1985,* for a detailed explanation of the methodology used in 1983 through 1985.

[3] Jeffery S. Passel, "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1986," *Employment and Earnings 33* (2, February 1986), pp.7-10.

[4] Jeffery S. Passel and Karen A. Woodrow, "Geographic Distribution of Undocumented Immigrants: Estimates of Undocumented Aliens Counted in the 1980 Census by State," *International Migration Review 18* (Fall 1984), pp. 642-671.

[5] Jeffery S. Passel and Karen A. Woodrow, "Change of Undocumented Alien Population in the United States, 1979-1983," forthcoming in *International Migration Review.*

as population controls. (See "Revised Procedures" section.) Estimates for the Hispanic subgroup populations, however, are not controlled to independent estimates. The estimates of the subgroup populations in the CPS are obtained through ratio-estimation using the proportional distribution of the Hispanic subgroups obtained from the CPS supplement for the particular date. Consequently, annual fluctuations in the subgroups can be the result of sampling and nonsampling error as well as real changes in the subgroups.

Fluctuations in the estimates of the Puerto Rican and Cuban populations have recently caused concern. Although increases in the Puerto Rican and Cuban populations were evident between the March 1982 CPS and the March 1987 CPS, fluctuations have been noted in the estimates of these groups between recent CPS years. The Puerto Rican population estimate obtained from the March 1985 CPS was 2,562,000 (±109,000), compared with the March 1986 CPS estimate of 2,340,000 (±105,000) and the 1987 CPS estimate of 2,284,000 (±104,000). The Cuban population experienced a similar change; the March 1986 and 1987 CPS estimates of Cubans are 1,003,000 (±72,000) and 1,017,000 (±72,000), respectively; for March 1985 it was 1,036,000 (±73,000). (See table A-1.)

The change in the Cuban population could be attributed to sampling variability since the 1985, 1986, and 1987 estimates of the Cuban population do not differ statistically (at the 90-percent level of confidence). Only part of the change in the Puerto Rican population could be attributed to sampling variability, however, because the differences between the 1985, and 1986 and 1987 estimates are statistically significant at the same level. (The 1986 and 1987 estimates of Puerto Ricans are not statistically different at the 90-percent level of confidence.)

We have investigated several possible causes of the apparent decrease in the Puerto Rican population over the 1985-87 period. The change in the number of Puerto Rican persons estimated by the CPS sample does not appear to be a result of the new CPS sample design. The new design uses a sampling frame based on 1980 census data. It was designed to improve the efficiency and quality of the overall survey estimates. If the fluctuations in the Puerto Rican estimates were due to the sample redesign, a decrease in the estimates should have been observed in 1985 when about half of the 1980 sample redesign was phased in. The expected decrease should have continued through 1987. However, the opposite occurred between 1984 and 1985—a large increase in the Puerto Rican population was observed instead.

Fluctuations in CPS data for Puerto Ricans could also be a result of nonsampling variability. Nonsampling errors can be attributed to many sources, e.g., inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, inability or unwillingness of respondents to provide correct information, inability to recall information, errors made in collection such as in recording or coding the data, errors made in processing the data, errors made in estimating values for missing data, and failure to represent all units with the sample. We have not yet found a totally satisfactory explanation for the pattern of changes shown. The Census Bureau plans to conduct further research into the decrease of the Puerto Rican population estimated by the recent Current Population Surveys.

Table A-1. Estimates of the Puerto Rican and Cuban Origin Populations in the United States: March 1982 to March 1987

(Numbers in thousands)

March CPS	Puerto Rican origin		Cuban origin	
	Estimate	Change[1]	Estimate	Change[1]
1982	2,051	(X)	950	(X)
1983	2,261	*210	1,008	58
1984	2,354	93	1,030	22
1985	2,562	*208	1,036	6
1986	2,340	*-222	1,003	-33
1987	2,284	-56	1,017	14

X Not applicable.
[1]Change in estimate from previous year.
*Significant at the 90-percent confidence level.

Appendix B. Source and Reliability of the Estimates

SOURCE OF DATA

The estimates in this report are based on data obtained annually in March 1982, 1986, and 1987 from the Current Population Survey (CPS) conducted by the Bureau of the Census and from supplementary questions to the CPS. The monthly CPS deals mainly with labor force data for the civilian noninstitutional population. Questions relating to the Hispanic population are asked about each member in every sample household. In addition, in March, supplementary questions are asked about ethnic origin. In order to obtain more reliable data for the Hispanic population, the March CPS sample was enlarged to include all households from the previous November which contained at least one sample person of Hispanic origin. For this report, persons in the Armed Forces living off post or with their families on post are also included.

Current Population Survey (CPS). The present CPS sample was selected from the 1980 census files with coverage in all 50 States and the District of Columbia. The sample is continually updated to reflect new construction. The current CPS sample is located in 729 areas comprising 1,973 counties, independent cities, and minor civil divisions in the Nation. In this sample, approximately 61,500 occupied households were eligible for interview. Of this number, about 3,500 occupied units were visited but interviews were not obtained because the occupants were not found at home after repeated calls or were unavailable for some other reason.

CPS estimation procedure. The estimation procedure used in this survey involves the inflation of the weighted sample results to independent estimates of the total civilian noninstitutional population of the United States by age, sex, race, and Hispanic/non-Hispanic categories. These independent estimates are based on statistics from the decennial censuses of population; statistics on births, deaths, immigration and emigration; and statistics on the strength of the Armed Forces.

RELIABILITY OF THE ESTIMATES

Since the CPS estimates were based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same questionnaires, instructions, and enumerators. There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling. The accuracy of a survey result depends upon both types of errors, but the full extent of the nonsampling error is unknown. Consequently, particular care should be exercised in the interpretation of figures based on a relatively small number of cases or on small differences between estimates. The standard errors provided for the CPS estimates primarily indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in responses and enumeration, but do not measure any systematic biases in the data. (Bias is the difference, averaged over all possible samples, between the estimate and the desired value.)

Sampling variability. The standard errors given in the following tables are primarily measures of sampling variability, that is, of the variations that occurred by chance because a sample rather than the entire population was surveyed. The sample estimate and its standard error enable one to construct a confidence interval, a range that would include the average result of all possible samples with a known probability. For example, if all possible samples were selected, each of these being surveyed under essentially the same general conditions and using the same sample design, and if an estimate and its standard error were calculated from each sample, then approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result of all possible samples.

The average estimate derived from all possible samples is or is not contained in any particular computed interval. However, for a particular sample, one can say with specified confidence that the average estimate derived from all possible samples is included in the confidence interval.

Standard errors may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The most common type of hypotheses appearing in this report is that the population parameters are different. An example of this would be comparing the mean family income of Hispanic versus the mean family income of non-Hispanics. Tests may be performed at various levels of significance, where a level of significance is the probability of concluding that the characteristics are different when, in fact, they are identical.

To perform the most common test, let x and y be sample estimates for two characteristics of interest. Let the standard error on the difference x-y be S_{DIFF}. If the ratio $R = (x-y)/S_{DIFF}$ is between -1.6 and +1.6, no conclusion about the difference between the characteristics is justified at the 0.10 level of significance. If, however, this ratio is smaller than -1.6 or larger than +1.6, the observed difference is significant at the 0.10 level. In this event, it is commonly accepted practice to say that the characteristics are different. Of course, sometimes this conclusion will be wrong. When the characteristics are, in fact, the same, there is a 10 percent chance of concluding that they are different. All statements of comparison in the text have passed a hypothesis test at the 0.10 level of significance or better. This means that, for most differences cited in the text, the estimated difference between characteristics is greater than 1.6 times the standard error of the difference.

Comparability of data. Data obtained from the CPS and other governmental sources are not entirely comparable. This is due in large part to differences in interviewer training and experience and in differing survey processes. This is an additional component of error not reflected in the standard error tables. Therefore, caution should be used in comparing results between these different sources.

Note when using small estimates. Summary measures (such as medians and percent distributions) are shown only when the base is 75,000 or greater. Because of the large standard errors involved, there is little chance that summary measures would reveal useful information when computed on a smaller base. Estimated numbers are shown, however, even though the relative standard errors of these numbers are larger than those for corresponding percentages. These smaller estimates are provided primarily to permit such combinations of the categories as serve each data user's needs. Also, care must be taken in the interpretation of small differences. For instance, even a small amount of nonsampling error can cause a borderline difference to appear significant or not, thus distorting a seemingly valid hypothesis test.

Standard errors of estimated numbers and estimated percentages. Since this is an advanced report, standard error parameters are provided in table B-1 for estimated numbers and estimated percentages of persons and families for only certain characteristics which are considered the most important among the data in the report.

Two parameters (denoted "a" and "b") are used to calculate standard errors for each type of characteristic. Direct computation of the standard errors will give more accurate results than the use of standard error tables.

Standard errors of estimated numbers and estimated percentages can be computed directly with formulas (1) and (2), respectively. The formulas are

Table B-1. Parameters for Calculating Standard Errors for Estimates of Persons and Families: March 1982 to 1987

Characteristic	Parameters	
	a	b
Persons		
Number of persons:		
Total and non-Hispanic	(X)	(X)
Hispanic origin	(X)	(X)
Hispanic subgroup	-0.000126	2,139
Educational attainment 25 + years old:		
Total and non-Hispanic	-0.000016	2,312
Hispanic origin	-0.000253	2,600
Families		
Number of families:		
Total and non-Hispanic	-0.000010	1,778
Hispanic origin	-0.000137	1,606
Poverty status:		
Total and non-Hispanic	+0.000084	2,067
Hispanic origin	+0.000084	2,067
Income:		
Total and non-Hispanic	-0.000010	1,896
Hispanic origin	-0.000165	2,067

$$S_x = \sqrt{ax^2 + bx} \qquad (1)$$

Here, x is the size of the estimate and a and b are the parameters associated with the characteristic.

$$S_{(x,p)} = \sqrt{(b/x)\,(p)\,(100-p)} \qquad (2)$$

Here, x is the size of the subclass of the population which is the base of the percentage, p is the percentage ($0<p<100$), and b is the parameter associated with the characteristic.

Table B-1 provides the values of the a and b parameters that are used in formulas (1) and (2) to create standard errors of estimated numbers and estimated percentages of persons and families.

Standard error of a difference. The formula for the standard error of the difference between two estimates x and y, is given by

$$S_{(x-y)} = \sqrt{S_x^2 + S_y^2 - 2r\,S_x\,S_y}$$

where S_x and S_y are the standard errors of the estimated x and y, and r represents the correlation between the two estimates.

For the year-to-year comparisons of income and poverty estimates the correlation coefficients, r, are contained in the detailed reports in this series, (Current Population Reports, P-60, Nos. 151 and 152). For other comparisons, assume r equals zero. Making this assumption will result in accurate estimates of the difference between two estimates of the same characteristic in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. If, however, there is a high positive (negative) correlation between the two characteristics, the formula will overestimate (underestimate) the true standard error.

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